

**§ 65.153 Absorbers, condensers, carbon adsorbers, and other recovery devices used as final recovery devices.**

(a) *Final recovery device equipment and operating requirements.* (1) Owners or operators using a recovery device to meet the requirement to operate and maintain a TRE above 1.0 as specified in § 65.63(a)(3) for process vents shall meet the requirements of this section.

(2) Recovery devices used to comply with the provisions of this subpart shall be operated at all times when emissions are vented to them.

(b) *Recovery device performance test requirements.* (1) There are no performance test requirements for recovery devices. Records of TRE index value determination shall be generated as specified in § 65.160(c).

(2) *Replace a final recovery device or control device.* Unless already permitted by the applicable title V permit, if an owner or operator elects to use a recovery device to replace an existing final recovery or control device at a later date, the owner or operator shall notify the Administrator, either by amendment of the regulated source's title V permit or, if title V is not applicable, by submission of the notice specified in § 65.167(a) before implementing the change. Upon implementing the change, the owner or operator shall comply with the applicable provisions of §§ 65.63(e) and 65.67(b).

(c) *Recovery device monitoring requirements.* (1) Where an absorber is the final recovery device in the recovery system and the TRE index value is between 1.0 and 4.0, either an organic monitoring device capable of providing a continuous record, or a scrubbing liquid temperature monitoring device and a specific gravity monitoring device, each capable of providing a continuous record, shall be used. Monitoring results shall be recorded as specified in § 65.161. General requirements for monitoring and continuous parameter monitoring systems are contained in § 65.156.

(2) Where a condenser is the final recovery device in the recovery system and the TRE index value is between 1.0 and 4.0, an organic monitoring device capable of providing a continuous record, or a condenser exit (product side) temperature monitoring device capable of providing a continuous

record, shall be used. Monitoring results shall be recorded as specified in § 65.161. General requirements for monitoring and continuous parameter monitoring systems are contained in § 65.156.

(3) Where a carbon adsorber is the final recovery device in the recovery system and the TRE index value is between 1.0 and 4.0, an organic monitoring device capable of providing a continuous record, or an integrating regeneration stream flow monitoring device having an accuracy of  $\pm 10$  percent or better capable of recording the total regeneration stream mass or volumetric flow for each regeneration cycle, and a carbon-bed temperature monitoring device capable of recording the carbon-bed temperature after each regeneration and within 15 minutes of completing any cooling cycle, shall be used. Monitoring results shall be recorded as specified in § 65.161. General requirements for monitoring and continuous parameter monitoring systems are contained in § 65.156.

(4) Unless previously approved by the Administrator under an applicable standard prior to the implementation date of this part, as specified in § 65.1(f), if an owner or operator uses a recovery device other than those listed in this subpart, the owner or operator shall submit a description of planned monitoring, reporting and recordkeeping procedures as required under § 65.162(e). The Administrator will approve or deny the proposed monitoring, reporting and recordkeeping requirements as part of the review of the submission or permit application or by other appropriate means.

(5) The owner or operator shall establish a range for monitored parameters that indicates proper operation of the recovery device. In order to establish the range, the information required in § 65.165(c) shall be submitted in the Initial Compliance Status Report or the operating permit application or amendment. The range may be based upon a prior performance test meeting the specifications in § 65.157(b)(1) or upon existing ranges or limits established under a referencing subpart. Where the regeneration stream flow and carbon-bed temperature are monitored, the

range shall be in terms of the total regeneration stream flow per regeneration cycle, and the temperature of the carbon-bed determined within 15 minutes of the completion of the regeneration cooling cycle.

**§ 65.154 Halogen scrubbers and other halogen reduction devices.**

(a) *Halogen scrubber and other halogen reduction device equipment and operating requirements.* (1) An owner or operator of halogen scrubbers and other halogen reduction devices subject to this subpart shall reduce the overall emissions of hydrogen halides and halogens by 99 percent, or reduce the outlet mass of total hydrogen halides and halogens to less than 0.45 kilograms per hour (0.99 pound per hour) as specified in § 65.63(b) for process vents, or § 65.83(b) for transfer racks, as applicable, and shall meet the requirements of this section.

(2) Halogen scrubbers and other halogen reduction devices used to comply with the provisions of this subpart shall be operated at all times when emissions are vented to them.

(b) *Halogen scrubber and other halogen reduction device performance test requirements.* Unless an initial performance test was previously conducted and submitted under the referencing subpart, an owner or operator of a combustion device followed by a halogen scrubber or other halogen reduction device to control halogenated vent streams in accordance with § 65.63(b)(1) for process vents, or § 65.83(b)(1) for transfer racks shall conduct an initial performance test to determine compliance with the control efficiency or emission limits for hydrogen halides and halogens according to the procedures in §§ 65.157 and 65.158. Performance test records shall be kept as specified in § 65.160(a) and (b), and a performance test report shall be submitted as specified in § 65.164.

(c) *Halogen scrubber and other halogen reduction device monitoring requirements.* (1) Where a halogen scrubber is used, the monitoring equipment specified in paragraphs (c)(1)(i) and (ii) of this section is required for the scrubber. Monitoring results shall be recorded as specified in § 65.161. General requirements for monitoring and continuous param-

eter monitoring systems are contained in § 65.156.

(i) A pH monitoring device capable of providing a continuous record shall be installed to monitor the pH of the scrubber effluent.

(ii) A flow meter capable of providing a continuous record shall be located at the scrubber influent for liquid flow. Gas stream flow shall be determined using one of the following procedures:

(A) The owner or operator may determine gas stream flow using the design blower capacity, with appropriate adjustments for pressure drop.

(B) If the scrubber is subject to regulations in 40 CFR parts 264 through 266 that have required a determination of the liquid to gas (L/G) ratio prior to the applicable compliance date for the chemical manufacturing process unit of which it is part, as specified in 40 CFR 63.100(k) (if the referencing subpart is 40 CFR part 63, subpart F), or prior to the implementation date as specified in § 65.1(f) (for all other referencing subparts), the owner or operator may determine gas stream flow by the method that had been utilized to comply with those regulations. A determination that was conducted prior to that compliance date may be utilized to comply with this subpart if it is still representative.

(C) The owner or operator may prepare and implement a gas stream flow determination plan that documents an appropriate method that will be used to determine the gas stream flow. The plan shall require determination of gas stream flow by a method that will at least provide a value for either a representative or the highest gas stream flow anticipated in the scrubber during representative operating conditions other than startups, shutdowns, or malfunctions. The plan shall include a description of the methodology to be followed and an explanation of how the selected methodology will reliably determine the gas stream flow and a description of the records that will be maintained to document the determination of gas stream flow. The owner or operator shall maintain the plan as specified in § 65.5.